Storrow Drive Tunnel Project
Joint Meeting of the Landscape and Transportation Advisory Committees
Joint Committee Meeting Number 4

May 23, 2007

Summary Minutes

The meeting was opened by Patrice Todisco, Chair of the Landscape Advisory Committee, and Elliott Laffer, Chair of the Transportation Advisory Committee. Mr. Laffer said this was a joint meeting of the committees and he invited the participants to introduce themselves and note their affiliations, if appropriate. (Please see the list of attendees at the end of the summary.)

Mr. Laffer said there was a great deal of information to be presented at the meeting, and he and Ms. Todisco hoped to allow time for questions and discussion at the end of each segment.

Summary of Subgroups Meeting

Ms. Todisco reported that several members of the Landscape Committee met to discuss the impact of the project on trees in the Esplanade and the proposal to transfer control and management of the parkways, such as Storrow Drive, from DCR to the Mass Highway Department (MHD). Based on concerns expressed by the participants, she is scheduling a meeting with an undersecretary from the Executive Office of Energy and Environment (EOEEA) to discuss the reasons for the proposed change. She will continue to pursue these topics with the committee and will keep everyone posted. Rep. Marty Walz added that such a change would have to be done legislatively. Bob O'Brien asked if such a transfer would imply that MHD standards would apply to the parkways, thus limiting the choice of options for the Storrow Drive Project? Ms. Todisco said there are a number of safety, signage and related issues and Mr. O'Brien is highlighting one of them.

Mr. Laffer reported that there was a Transportation Subcommittee meeting to do some "blue sky" thinking about the alternatives. The meeting focused on two options in particular. D-3 was developed by DCR and includes a single tunnel accommodating two lanes of traffic each way on Storrow Drive between Arlington and Berkeley Streets with no tunnel mechanical ventilation or roof ventilation openings, given its brevity. This option allows existing traffic moves, except the eastbound exit to Arlington St. and it also re-

opens the Dartmouth St. eastbound ramp. It offers an at-grade entry/connection between the Public Garden and the Esplanade. The committee – with significant work by Tony Pangaro – developed an additional surface option. Now called B-3, this option is a surface parkway with an eastbound underpass in a relatively short boat section near Arlington (Otter) Street. The westbound lanes would be depressed slightly near the Hatch Shell. The westbound exit to Arlington St. would cross over the depressed eastbound roadways. It does not include an eastbound exit to Arlington St. or a westbound entrance from Berkeley St. It includes a re-opened eastbound exit to Dartmouth St. Mr. Laffer said the committee members thought the option deserved looking at in more detail to assess feasibility, cost, impacts on local traffic, etc. DCR has asked SGH to undertake this work and to report on it at the June 20 meeting.

Mr. Laffer added that a few other suggestions arose from the meeting:

- To look at Charles Circle and, in particular, a proposal from MGH to build a ramp for an eastbound exit to the hospital that keeps its traffic out of the circle (which badly needs to be "fixed," in the group's opinion)
- To look at the bigger picture in the project area and determine whether a Mass Turnpike exit can be built
- To assess the safety of the westbound Bowker Overpass entrance, which is poorly positioned, after a blind corner, and which many drivers take at too high a speed
- To pursue more mass transit options in both the short and long-term to alleviate general roadway crowding and to get more drivers off Storrow Drive during construction

Mr. Laffer said that the group discussed alternatives such as congestion pricing and tolls, but came to no consensus on them. Mr. O'Brien noted that there are pointed questions that the MBTA needs to answer that were not included in the presentation at the last meeting. Mr. Baecker indicated that Beta Group has been asked to look at safety improvements to the westbound Bowker entrance as part of its analysis of Option B-3.

Presentation of Options Summary Chart

Karl Haglund, DCR, outlined the Options Summary Chart that the team drafted for use by committee members and their organizations. The members requested a form of summary to organize the information about each of the options. DCR and the consulting team drafted the chart and are in the process of refining the categories and information. Mr. Haglund explained that the first item, Impervious Area Changes, refers to Back St. and the curb areas to the south of Storrow Drive, while the section on page 2, Open Space Impacts, summarizes data north of the curb line. Referring to page 3, Mr. Haglund said option D presents the opportunity to add the largest number of trees because the new tunnels can be built with more soil on top, providing two more acres for planting. He briefly reviewed the remainder of the categories and noted that the team will continue to revise the chart to include data from the new surface (B-3) and tunnel (D-3) options, as well as making sure the figures match in each area (the landscape data, for instance, is still being reconciled,

and there are some differences in how data is counted or organized that results in different numbers in the same categories). Mr. Fuller, for example, mentioned the difficulty of adding up the various tree inventories.

The members discussed the difference between the tunnels in options A and D. Mr. Fuller said that the option A under consideration is a reconstructed tunnel that does not include fully rebuilding the roof of the tunnel so that it will not have a sufficient depth of soil for planting trees (while option D includes completely new tunnels, which will allow adding more soil on the top for trees of a certain size). Mike McCall, SGH, elaborated on this topic and said that in A, the westbound roof will be replaced completely and the walls and bottom slab will be reinforced. The amount of concrete that can be used on the walls and bottom slab will be limited by the need to maintain a certain roadway width and vertical clearance. Mr. Haglund reminded the audience that in the current setup – Option A – one ramp is on top of the tunnel, also limiting the space available for tree planting. Mr. Baecker added that DCR indicated in the Environmental Notification Form (ENF) filing that it was carrying forward the rehabilitation option, which has an estimated service life of 40 years. The full range of Option A possibilities was reviewed in the ENF, including rebuilding (versus rehabilitating). Rep. Marty Walz asked if rebuilding was still a possibility, given that if offers a longer life-span. Mr. Baecker said that the Secretary's Certificate directed DCR to include looking at new tunnels, which are in options C and D, while A is a different alternative. Mike O'Dowd, Mass Highway Department, said that option A could include more planted and landscaped areas than it has now, and Mr. McCall agreed that landscaping could be extended but that there probably would not be sufficient depth of soil directly over the tunnel segments for large trees.

Mr. Haglund said that the team would update the options summary chart and send it to the members for their use in the next week.

Analysis of Trees Lost by Option

Harry Fuller, Carol R. Johnson (CRJA), distributed three sets of handouts:

- Maps assessing the tress lost for Options A, B, C and D
- An *Esplanade Tree Inventory* correlated with the maps using a tree numbering system
- A *Storrow Drive Esplanade Tree Assessment* listing the conditions of the trees in the study area

Mr. Fuller said that DCR asked CRJA to look at all of the trees in the study area for options A-D. While there are some existing studies and summaries, CRJA was not able to reconcile them with the trees on the Esplanade now, so the team did a new inventory. The maps indicate the areas under investigation for each of the main options, while the summaries list the tree number, caliper size, species, general condition and option impact by letter. Mr. Fuller summarized the assumptions used to develop the summary data:

- There will be a zone approximately 20 feet wide adjacent to the construction on the Esplanade side of Storrow Drive (north) to permit equipment to access the tunnels and roadway. Trees in this zone, represented by a dark green swath along the road, have been mapped and analyzed.
- This green zone represents, to Mr. Fuller, the maximum number of trees that will be affected by construction. He anticipates that a number of the trees on the northern edge of this area could be preserved if wrapped and protected by the contractor.
- Trees along Back St. in the zone of construction will all have to be removed and replaced. Under the assumption that two lanes of traffic will be maintained during construction (the partial closure scenario), the lanes will be placed here in all of the options and 52 trees will have to be removed. This number is constant for each option, while the number of trees removed for construction in the Esplanade varies by option. If the choice were made to move to full closure of Storrow Drive, there would probably be a dramatic change in the number of trees affected on this south side.
- There is an area north of the roadway for construction staging. This area measures approximately 50 x 200 feet and it has been placed in a site that should minimize tree loss for all of the options (four trees are removed).

Mr. Fuller said the goal of his presentation is to give the committee members a sense of the magnitude of difference for each option. Beginning with option A, he said that 5 trees would be removed on the north side of Storrow Drive for construction access, with 6 trees removed to rebuild the Fiedler Footbridge with longer ramps (ADA accessibility). To the south, 52 trees along Back St. would be removed. The A totals are 15 trees in the Esplanade; and 52 along Back St.

For Option B, Mr. Fuller listed 7 trees in the Esplanade to be removed, several of them large-caliper Pin Oaks, and 4 trees removed for staging. The Back St. trees would also be removed.

For Option C, Mr. Fuller said there are 35 trees in the construction zone stretching from the Hatch Shell past Clarendon St. This is due to the work area needed to complete the new westbound tunnel: the zone stretches from boat section to boat section (tunnel portal to portal). Pin Oaks comprise 60% of this figure, with calipers of 8 to 20 inches and an average diameter of 15 inches. The largest trees are at the west end of the zone, with two 20-inch Linden trees and one 30-inch Sycamore. Mr. Fuller said that DCR could work with the design of C to see if those trees could be spared, given their size.

Option D involves the largest loss of trees in the Esplanade due to the need to excavate beneath the Esplanade for the tunnels from the Pinckney St. area to the east nearly to Clarendon St. on the west. Mr. Fuller said that 92 trees of a wide variety of species averaging 12 to 15-inches in diameter would be affected. Mr. Fuller said he hoped many of the trees along the north side of the zone could be saved but he included all of them as potential losses since they are in the construction zone.

Margaret Dyson asked is the staging area was fixed and how vehicles would access it? Mr. Fuller said that the team moved the staging area a few times to find a location that could be reached via existing paths or walkways (there is one slightly to the west of the site) and would involve taking down fewer trees. Mr. McCall added that there is not much space on the Esplanade in this location to find one-quarter acre, and the team looked at Back Bay and other locations, to no avail. It is not realistic to use a far flung staging area, but he welcomed suggestions. Steve Wintermeier suggested looking east to the staging area for the 4th of July festivities behind the Hatch Shell and closer to the tennis courts and State Police parking lot. Pierre Bonin, a Dartmouth resident who bikes in the area, expressed dismay that DCR would consider taking trees down for a roadway project. Bob O'Brien asked if any of the larger trees could be transplanted? Mr. Fuller said that that most of the large caliper trees of concern could not be transplanted, they would not survive. There was a discussion about how to protect trees along the north line of the construction access area. Marilyn Wellons said that contractors promise to protect trees but the only way to assure that happens is for concerned citizens to watch every day.

Tunnel Condition Survey and Repair Recommendations

Mike McCall, SGH Project Manager, used a PowerPoint presentation to summarize the results of a tunnel condition survey report and recommendations the firm prepared on the Storrow Drive Tunnel for DCR. Mr. McCall said that the tunnel is safe, but portions of the structure are actively deteriorating and DCR is inspecting it regularly, at least monthly, to identify any new problems and take measures to address them promptly. SGH identified the problem areas needing repairs as emergency, immediate or interim. Most of the problems are localized and related to corrosion caused by water infiltrating the structure. The primary safety concern is that relatively small pieces of concrete may come lose from the main structure and fall onto the roadway. Concrete is deteriorating primarily due to corrosion and expansion of embedded reinforcing steel bars, and also because of freeze-thaw damage exacerbated by ASR (a concrete chemical reaction that was not understood when the tunnel was built). Mr. McCall listed other localized problems caused by impact damage, metal fatigue, exposed reinforcing bars and a clogged drainage system.

Based on its inspection, SGH recommended one emergency repair to DCR. This was to address spalling concrete at the entrance to the Berkeley Underpass (Mr. McCall showed a photo of the exposed reinforcing steel). The contractor knocked lose pieces from this 20-foot area and made repairs in March.

Rep. Walz asked Mr. McCall how quickly these problems were addressed once they were identified. Mr. McCall said that DCR has a contractor on call for emergency repairs and the work was completed within three to four days. Emergency work is done in days or weeks; the identification of *immediate* means that a condition is not a sudden danger but has been monitored and is deteriorating and needs attention. Immediate repairs will be done within the next few weeks. Interim repairs will be done on a schedule that is being prepared. The interim repairs will slow deterioration of the tunnel.

Mr. McCall said that some immediate repairs were identified. The first is at the entrance to the main tunnel, above a steel roof beam that was damaged by impact with a vehicle. SGH has recommended removal of deteriorated concrete and construction of an up-turned concrete beam over the portal. The damaged steel beam can be left in place. (Mr. McCall showed a photo of the beam and area in question.)

The next item is a set of long, exposed lengths of steel reinforcing bars in two locations. Mr. McCall said that repairs were done in 1993 on the expansion joints in the east end of the mail tunnel and concrete was removed from between the roof slabs and was not replaced at one location. The gap left the steel reinforcing bars subject to corrosion and SGH has recommended anchoring the bars with hanger supports to prevent them from falling if they further corrode and break.

The third immediate repair will be to steel roof beams that are suffering from metal-fatigue distress in two locations. In 2004, DCR found a beam with a 1-foot long crack and it was repaired with steel plates and angles. This is a similar issue and Mr. McCall showed a photo of the beam indicating metal-fatigue distress. The current condition does not compromise load-carrying ability but it should be repaired to prevent an actual crack. Mr. McCall said that this work will begin in the very near future, beginning Friday night, and will extend over about three weeks. The work will require lane closures between 10 PM and 5 AM and the contractor will avoid special events and Red Sox game nights. The tunnel will have to be closed completely for one or two nights when the beam at the west portal is repaired. Traffic will be routed to Memorial Drive on those nights. Peter Thomson asked who people could call to get information on this schedule. Mr. Lenhardt said they can call 617-626-1250 (Ms. Farrell will also email closure notices to committee members).

Interim repairs are less urgent issues needed to stabilize problem areas and maintain the safety of the tunnel for several years until the major reconstruction project is completed. DCR is currently reviewing the draft condition-evaluation report and interim repair recommendations. The repairs will be prioritized according to the need to maintain public safety, the value of the repairs to the selected reconstruction option and available funding. In the meantime, Mr. McCall said that monthly inspections will continue and any new hazards that are found will be addressed immediately.

Rep. Walz asked when the condition report will be made public. Jim Baecker said that DCR will finish its review and should have it available by the middle to end of June. Rep. Walz said that she is getting lots of questions from constituents about the condition and safety of the tunnel, and it is critically important to maintain public confidence. She asked if the tunnel will be safe after 2010 and until the new work is complete. Mr. McCall said that the interim repairs are intended to have a 5-10 year life. The proposed repairs do not address the original load-rating deficiencies – the original design deficiencies – but the repairs are intended to monitor and address conditions to keep the tunnel safe for use. In response to a question, Mr. Lenhardt said that if an inspection found an emergency condition that endangers the public, DCR will close the tunnel. He does not expect that will happen. He also addressed the issue of installing netting in the tunnel to catch spalling

concrete. This approach was used several years ago employing metal netting. The net itself was problematic and fell; it was difficult to affix and he felt it was more problematic than inspecting the structure. That is now being done end to end and DCR plans to be very cautious about public safety.

Noise and Air Quality Results

Rich Lampeter, Epsilon Associates, used a PowerPoint presentation to illustrate his remarks on air quality and noise analysis underway for the Draft Environmental Impact Report (DEIR). Mr. Lampeter explained that air quality analysis is divided between microscale and mesoscale analysis.

Microscale analysis is a measure of mobile sources of pollutants. It measures carbon dioxide concentrations at specific intersections for modeling. Epsilon uses U.S. Environmental Protection Agency (EPA) models to calculate the impacts, which are assessed according to National Ambient Air Quality Standards (NAAQS). The Mesoscale analysis also tracks mobile sources but it measures changes in regional emissions for Volatile Organic Compounds (VOCs), Nitrous Oxide (NOx) and Green House Gases (GHG). This measure provides information on how alternate configurations (the various Storrow Drive options) can be compared to the existing configuration, which is option A.

Mr. Lampeter said that the microscale analysis was done at four intersections with a Level of Service of F (Level of Service ranges from A to F, with F being the worst): Beacon at Berkeley; Beacon at Arlington; Storrow Drive and Berkeley St. (for B and C only); and Storrow Drive and Arlington St. (for B and C only). Mr. Lampeter described the model, which generates emission rates for carbon dioxide based on an input file provided by the MA Department of Environmental Protection (MADEP). Points around each intersection and in the Esplanade were modeled and the modeled concentrations were added to background values that DEP collected. The resulting figures for each option were then compared to the national standards (NAAQS) for one hour and for eight hours.

Mr. Lampeter showed a chart summarizing the data:

Microscale Analysis Results
Maximum Modeled Impacts

	Peak	1-hr Modeled CO Impacts (ppm)	8-hr Scaled CO Impact (ppm)	1-hr Total CO Impacts* (ppm)	1-hour NAAQS (ppm)	8-hr Total CO Impact* (ppm)	8-hour NAAQS (ppm)
Option A	PM	1.7 (Beacon/Berkeley)	1.2	4.7	35	3.0	9
Option B	AM	2.3 (Beacon/Arlington)	1.6	5.3	35	3.4	9
Option C	AM	2.3 (Beacon/Arlington)	1.6	5.3	35	3.4	9
Option D	PM	1.7 (Beacon/Arlington)	1.2	4.7	35	3.0	9

*Total impact includes background (1-hr background = 3 ppm; 8-hr background = 1.8 ppm)

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The highest impacts for the intersections measured were at Beacon and Berkeley Streets and at Beacon and Arlington Streets, but the values were substantially less than both the 1-hour and 8-hour national standards.

For the mesoscale analysis, Epsilon used the data from BETA's intersection analysis. For this regional approach, the emissions are calculated in the measure of tons per day using average daily traffic volumes, average daily speeds and link lengths.

Mr. Lampeter summarized the data for the mesoscale analysis:

Mesoscale Results

Pollutant	Units	Option A (Existing Configuration)	Option B	Change	Option C	Change	Option D	Change
VOC	tons/day	0.0723	0.062	-0.010	0.067	-0.005	0.0725	0.0002
NOx	tons/day	0.0606	0.050	-0.010	0.055	-0.005	0.0604	-0.0002
GHG	tons/day	206.053	166.954	-39.099	186.264	-19.789	204.401	-1.652

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The table compares the results for options B, C and D as a change from option A, the existing configuration, for VOCs, NOx and Green House Gases (GHG). Options B and C measure slightly lower than A on all three parameters, while D is lower on two of three. The levels for the mesoscale analysis are well below the standards.

Marilyn Wellons clarified that the data reflect emissions from autos only, since trucks are not permitted on Storrow Drive. Mr. Lampeter said that is the case. In summary, all of the options fall well below the national standards. Ms. Fletcher commented that some people might think that the standards are not appropriate, but that is another issue. Epsilon applied the standards that are laid out in the environmental process.

On the microscale level, the results for B and C are showing the reduction of through vehicles on Storrow Drive depicted in the model. In B, Storrow Drive vehicle volume is down while volume is up on Beacon St. The microscale analysis looks at the concentrations from emissions at particular points, which explains the results. Mr. Lampeter said that modeling on the mesoscale level – which relates to regional air quality by measuring vehicle emissions – takes into account back-ups, waiting time, etc. The results for both scales show little difference across the options from the current levels on the microscale and mesoscale levels. Ms. Fletcher added that there may be other intersections in Back Bay or on Beacon Hill that were not modeled where the air quality worsens slightly, but none of the data are even close to maximum levels, so it is unlikely that the data will change significantly. Sufficient air movement, seasonal changes and other factors are affecting the air quality.

Mr. Laffer said that the committee members may have requests to model specific intersections, and they should let him or DCR know.

Mr. Lampeter addressed the issue of air quality during the construction phase. He said there are mitigation strategies to be applied to control dust and diesel emissions, including controlling fugitive dust emissions by using wetting agents and covering trucks. The project will participate in DEP's Diesel Retrofit Program to reduce emissions from diesel engines as well.

Moving to the noise monitoring and modeling, Mr. Lampeter first defined some of the terms he would use (they appear on the handout). He showed a noise thermometer to give everyone an idea of the range of noises that people typically hear, ranging from a quiet bedroom at night (30 decibels) to a truck at 100 feet (more than 80). People typically notice noise when it increases by 3 to 4 decibels.

The project undertook short- and long-term modeling. Short-term monitoring included four 20-minute measurements designed to collect peak-hour traffic noise. Long-term monitoring was composed of three, four-day continuous measurements outside of residences along Storrow Drive and on Beacon Hill.

The existing noise monitoring results for short-term monitoring showed the highest noise level location near the Hatch Shell at 67-73 dBA. The lowest result was measured at the monitoring location between Dartmouth and Clarendon Streets.

For the long-term continuous monitoring, the highest level – 46 to 68 dBA – was measured at the location east of Arlington St., and the lowest nighttime dBA was 46 at all three long-term locations.

Turning to the table of noise modeling results for the built options, A, B, C and D, Mr. Lampeter said that the B option shows the highest noise levels at each location. (As with the air quality model, all results are compared to option A, which is the baseline, so the figures are listed as + or – the baseline level for A.) The representative changes at the modeled points in decibels for options C and D are lower than for A. Mr. Lampeter said the difference is just at the level at which people notice it. Others suggested that the difference is very small.

Rep. Walz asked how the results take loud noises into account. She said in the summer, in particular, when people have their windows open, the noise of revving motorcycles at traffic lights and car horns honking seems to be a lot louder than these measurements are accounting for. Mr. Lampeter said that the noise monitoring includes the range of sounds produced and is an average sound level, so the components Rep. Walz is referring to are included in the data. Mr. Laffer pointed out that the increase in noise levels is an exponential one, so an increase of 10 decibels is actually a doubling of the noise that people are hearing.

Mr. Lampeter briefing described noise levels for construction. Typical equipment from 50 feet away varies by type of equipment, but for mechanical it ranges from 85-90 dBA and for impact equipment it rises to 95 to 100 dBA. The actual levels vary by location and distance. The project can mitigate this noise by minimizing the noisiest activities at night, where possible; ensuring mufflers are working properly; replacing or mitigating noisy equipment; using vibratory rather than impact pile drivers; and employing temporary noise barriers.

Several audience members discussed the nightly constant noise in particular and said being awakened by noise all night long is a serious issue that needs to be taken into consideration. Mr. Haglund pointed out that there are more traffic lights in B and Mr. Wintermeier pointed out the constant hum of Storrow Drive. Another speaker suggested that the noise and air quality monitoring is not capturing the impact on Back Bay or further from these specific points. Mr. Laffer said that the mezoscale analysis is intended to capture impacts over a larger area and the modeling does show some emissions increasing. He noted that the model shows emissions, not concentrations. There was a discussion about the need for more microscale analysis based on additional monitoring. John DeBenedictis, Boston Traffic Department, suggested that the project should be providing network-wide results. Vehicle hours of delay is an alternate measure used by the Federal Highway Administration for funding. The City is concerned about these issues.

Sharon Malt asked if comparable figures exist for a similar parkway or roadway, such as Fresh Pond Parkway. No one knew if the data is available, but Mr. Laffer suggested the issue could be researched.

Mr. Laffer said that he is planning to meet with people who are interested in pursuing issues related to the MBTA and transportation options in a subcommittee meeting. He asked people to contact him. He suggested that Partners, MASCO, and other committee members might be interested. Rep. Walz objected, saying that this is work the MBTA was asked to do and she would prefer to express her extreme displeasure with the lack of information made available in the recent presentation. Mr. Baecker noted that the MBTA has made it clear that there is little capacity available on the Green Line, while there is capacity at some of the MBTA's remote parking facilities. Getting together a private/public partnership could be one approach that would supplement the MBTA service if there is capacity on private carriers provided by employers, such as Partners and MASCO. Rep. Walz said she believes that is letting the MBTA off the hook and is a necessary but not sufficient response to the challenge involved in getting more drivers out of their cars, particularly during construction. There was further discussion of this topic and the fact that the Certificate asks DCR to provide information on alternate transportation and DCR – at the Commissioner level – did ask the MBTA for assistance in putting this kind of information and recommendations together.

Mr. Laffer said the purpose of the subcommittee is not to let the MBTA off the hook but to do some brainstorming, involve the MBTA, major employers and those with an interest in this issue.

Mr. Laffer thanked the members of the committees for their participation and reminded them that the next meeting will take place on June 6.

ATTENDANCE – Landscaping Committee Members

Committee Members (+ indicates present at meeting, only for this category)

+	Margaret Dyson	City of Boston, Parks and Recreation Department
	Bob Corning	Boston Society of Landscape Architects
	Tel McCormick	Mass Bike
	Wendy Landman	Walk Boston
+	Bob Sloan	Walk Boston
+	Patrice Todisco	The Esplanade Association
	Renata von Tscharner	Charles River Conservancy
	Pallavi Mande	Charles River Watershed Association
+	Stephanie Hurley	Charles River Watershed Association
+	Susan Barrow-Williams	Community Boating
	Sarah Monaco	Back Bay Garden Club
	Jackie Blombach	Back Bay Garden Club
	Linda Cox	Beacon Hill Civic Association
+	Sharon Malt	Beacon Hill Garden Club

Attendance – Transportation Committee Members

Committee Members
+ indicates present at meeting

+	Tom Nally	A Better City
+	Meg Mainzer-Cohen	Back Bay Association
+	Peter Thomson	Beacon Hill Civic Association
+	Steve Young	Beacon Hill Civic Association
+	Elliott Laffer	Boston Groundwater Trust
	Michael Donovan	Boston University
+	Jim Shaer	Boston University
	Leslie Greis	Cambridgeport Neighborhood Association
+	Drew Phelps	Cambridgeport Neighborhood Association
	Kevin Casey	Harvard University
	Deborah Carrow	Back Bay Association
+	Bhupesh Patel	Livable Streets Alliance
+	Christi Apicella	MASCO
	Sarah Hamilton	MASCO
+	Kelley Brown	MIT
+	Steven Wintermeier	Neighborhood Association of Back Bay
+	Barry Solar	Neighborhood Association of Back Bay
+	Philip Houck	Neighborhood Association of Back Bay
	John Messervy	MGH/Partners HealthCare System, Inc.

	Bonnie Michelman	MGH/Partners HealthCare System, Inc.
+	Marilyn Wellons	Regional Transportation Advisory Council
	Larry Adkins	Riverside Neighborhood Association
+	Malek Al-Khatib	West End Civic Association
+	Carol Niemira	West End Civic Association
	Wendy Landman	Walk Boston
+	Bob Sloane	Walk Boston
+	Adam Shulman	City of Cambridge, Transportation Planning

Municipal and State Representatives

Representative Marty Walz	
Tom Lisco	Central Transportation Planning Staff (CTPS)
John DeBenedictis	City of Boston
Kate Fichter	MA EOT
Sanjay Kaul	CTPS
Bill Kuttner	CTPS
Scott Peterson	CTPS
Michael O'Dowd	Mass Highway Department

Project Staff

Jim Baecker	DCR
Karl Haglund	DCR
David Lenhardt	DCR
Mike McCall	SGH
Nancy Farrell	RVA
Ken Petraglia	Beta Group
Mike Wisielewski	Beta
Rich Lampeter	Epsilon
Kate Lesser	Epsilon
Victoria Fletcher	Epsilon

Members of the Public

Joe Crowley	Mass General Hospital
Bob O'Brien	West End Civic Association
Alex Valentina	
Jeannette Hermann	Beacon Hill Civic Association
Suzanne Besser	Back Bay Sun, Beacon Hill Times
Shayndi Raice	Shayndi.Raice@gmail.com
Carrie Russell	CRussell@clf.org
Steven R. Berke	West End resident
Pierre Bonin	Dartmouth St. resident
Laura Kershner	Cambridge Ward 5 Democratic Committee
Steve Kaiser	Association of Cambridge Neighborhoods